Abstract ID: 24

Title: TERRESTRIAL AND AQUATIC HABITAT REQUIREMENTS OF MARINE

OTTER (Lontra felina) IN THE SOUTH OF CHILE

Category: Ecology

**Student**: Not Applicable

**Preferred Format**: Either Oral or Poster Presentation

**Abstract**: There are two exclusive marine otters, Enhydra lutris and Lontra felina. E. lutris may have adapted to its aquatic cold environment by increasing insulation, metabolic and body size. L. felina in comparison, by being the smallest of its genus and living in the cold environment of the South American Pacific coast from 6°S to 56°S cast doubt on the relationship of greater size and aquatic life style. The objective of this study was to assess the importance of the terrestrial habitat to this species' aquatic adaptation. We estimated otter densities, aquatic and terrestrial activity and compared results with the concentration of spraints, prey remains, terrestrial rocky structures, diet, prey availability and the otter's energy input. From June 1999 to June 2000 eight hours of observation during one day per month per site were recorded at four sites in the south of Chile. Every month spraints were collected and prey availability was assessed using traps. An average of 3.8 otters/km was observed with differences between sites. Pups were observed all year round. The site with the highest density had the greatest number of terrestrial structures described as suitable for L. felina, while the site with the lowest density had the lowest number. Diet from spraint analysis was composed of up to 100% of crustaceans and 20% fish. Variation in prey availability was reflected in the otter diet. Otters spent 20% of the time in the water, mostly feeding, selecting prey according to seasonal availability rather than energy content. L. felina seems to have a social behavior and a strategy for energy conservation associated to small overlapping home ranges and a restricted aquatic life, which depend on the availability of prey that is easy to consume, and the abundance of safe shelters (rock cracks, caves and reef rocks) in the terrestrial habitat.